#### **Invited Participant Database**

Name			
Name preferre	d on name tag		
Title			
Organization			
Street Address	3		
City	State	Zip	
Citizenship	Birthdate, if foreign		
Birthplace	City	Country	
Office Phone			
Fax			
Email			
0 10 1			

## **Specific Interest**

☐ Threats and Scenarios

☐ Policy and Diplomacy

☐ Weapons and Operations

Participant's data must be submitted prior to their participation in this project. No fee is charged; meals will be provided. Send information to:

Karen Kimball Lawrence Livermore National Laboratory Center for Global Security Research PO Box 808, L-189 Livermore, CA 94551 Fax: 925-422-5252

Fax: 925-422-5252 Ph: 925-422-6141



#### **A Global Security Futures Project**

The Center for Global Security Research, in collaboration with other security study centers, universities, and governmental and nongovernmental organizations, and accessing the significant technical capabilities of the Lawrence Livermore National Laboratory, probes issues at the intersection of technology and policy. Our goal is to provide fresh insight into important national security issues. While most of our projects focus on present international security concerns, this futures project looks out beyond the next decade in order to guide current actions toward a more secure world.

#### **Conference Location**

November 29–30, 2001 Lawrence Livermore National Laboratory 7000 East Avenue Livermore, CA 94550

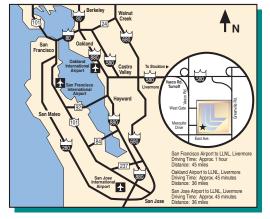
#### **Conference Interactive Web Site**

http://cgsr.llnl.gov/

#### For administrative information contact

Karen Kimball 925-422-6141

925-422-6141 kimball2@llnl.gov

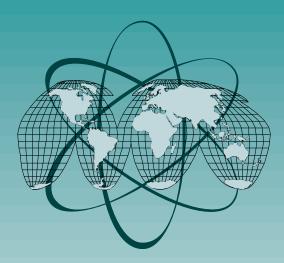




# Whither Deterrence?

Stability Strategies for the Future

Implications for Nuclear Weapons



Workshops Throughout 2001

Conference November 29-30, 2001 Livermore, California

A Global Security Futures Project sponsored by the



# Whither Deterrence? Stability Strategies for the Future Implications for Nuclear Weapons

A Global Security Futures Project

# **Invited Participants**

Participants knowledgeable, both specifically and broadly, of the gamut of threat scenarios, policies and strategies, and weapons systems, conventional and nuclear, are being invited from US government agencies, national laboratories, research universities, research centers and institutes, and industry.

#### **Hosted by**

Ronald F. Lehman II, Director Center for Global Security Research Lawrence Livermore National Laboratory

## For Information

Carl Poppe poppe1@llnl.gov Center for Global Security Research Lawrence Livermore National Laboratory PO Box 808, L-189, Livermore, CA 94551 Ph: (925) 423-6886; Fax: (925) 422-5252

#### **Deterrence**

The concept of deterrence, honed during the Cold War, focused primarily on the threats posed by Soviet and US nuclear weapons. It was believed that these dominant nuclear forces would also deter other states. Much has changed in the last ten years, as the world transitioned from bi-polar to multi-polar and factional, and technology spread with globalization. New threats have emerged, both in the form of new players and the appearance of new weapons and delivery systems. Over the next 20 years, we anticipate even greater changes and challenges, both in the geopolitical forces that shape tensions in the world and in the development of technology that, improperly used, can threaten global security.

## Questions

What will deterrence mean 15 to 20 years from now? What role will nuclear weapons play? How should the emergence of new nuclear powers or nuclear

alliances inimical to global security be dealt with? How does multipolarity and the emergence of subnational threats alter the view of deterrence? Can traditional ideas of deterrence work to improve stability in the face of chemical and biological weapons? These, and other questions, need to be examined today in order to define the most critical issues that policy makers must face in the near term if we are to be prepared for the future.

# Threats, Scenarios, and Transforming Events

Will the major nuclear armed nations steadfastly avoid nuclear tragedy? How will the newly nuclear armed states handle this responsibility? Will more nations nuclear arm? Will fanatics obtain such weapons and use nuclear terrorism? The tide of technology is rising worldwide making physical nonproliferation efforts ever more difficult. Will anonymous biological attacks on animals, crops, and humans cause devastation and heighten tension? Will diseases impede globalization? Will new weapons or tactics be invented that fill the gap between conventional and nuclear weapons? How wide will the revolution and counter-revolution in military affairs reach? How will the competition for world resources impact stability?

#### **Policy and Diplomacy**

Will existing multilateral non-proliferation agreements (NPT, BWC, CWC) be sufficient? Will additional arms control agreements be needed? Will unilateral declarations be useful? How would these be implemented, verified, and enforced? Will such agreements and declarations provide effective deterrence against weapons of mass destruction? What additional informal measures (regional cooperation, confidence building, transparency) will be needed and how will these be implemented? What will be the role of international organizations (NATO, SEATO, UN, IAEA)? How will international peace keeping and enforcement actions be decided? Commanded? Soldiered? Armed? Paid for? What should be the roles of US forces, defenses, intelligence, and domestic security agencies in these actions?

## **Weapons and Operations**

What forces and technologies might be globally available in 2020? What weapons and force structures

might best deter aggressive actions, mitigate risks to the US and others, and optimize stability? What adversarial forces and values should be held at risk? With what mix of nuclear and conventional forces? What level of readiness is most stabilizing? How effective will defenses be? How will they interplay with offenses? How should offensive and defensive capabilities be extended to our allies? What space assets and other technical means are needed? How will they be protected? How much should intelligence and warning be cooperative? Can asymmetrical threats from rogue nations or terrorists be deterred, prevented, countered? What roles for civilian police organizations? What infrastructures will we need for our technical, production, and military efforts? How will asymmetries in infrastructures between nations affect stability?

#### **Exploratory Workshops**

Our method is to pose specific questions that will define what we know, what we do not know or cannot agree on, and what is needed to resolve the unknowns. We are planning a series of interactive workshops to examine these questions and issues, engage key thinkers, and prepare input for the final conference. Dates and locations will be posted on our web site. Participation is by invitation.

#### Web Site Interaction

As ideas are developed and the details of the workshops and conference are set, these will be posted at:

#### http://cgsr.llnl.gov/

Participants are encouraged to review this information and send your questions and comments to Carl Poppe.

#### Conference

November 29–30, 2001 Livermore, California

The conference format will be interactive with presentation and integration of the workshop findings on the first day, and interaction with a group of distinguished national leaders and experts on the final day. The goal is to formulate specific predictions useful for defining national strategy and policy, and to identify the highest priority elements for future work.